

Curriculum Vitae

Mafalda Sofia Coelho da Cruz Sarraguça

Mafalda Sarraguça graduated in 2000 in Industrial Chemistry in the Faculty of Sciences and Technology in the University of Coimbra. In 2004 she finished her Master degree in Chemistry, specialization in Chemical Control in the same Faculty. In 2010 Mafalda Sarraguça completed her PhD in Pharmaceutical Sciences, specialization in Analytical Chemistry in the Faculty of Pharmacy in the University of Porto (FFUP). At present time Mafalda Sarraguça is a researcher in LAQV@REQUIMTE/FFUP. She is also an invited teacher at the Faculty of Pharmacy of the University of Porto where she gives laboratory classes of Physical-Chemistry to the first year students of Pharmaceutical Sciences degree. She is also a collaborator of the Centro de Química Estrutural (CQE), a research unit of the Instituto Superior Técnico (IST) of the University of Lisbon. Her main research activity is focused on supramolecular chemistry to improve drugs properties such as solubility, palatability, mechanical properties using green chemistry approaches. She is proficient in several solid-state analytical methods, such as mid and near infrared spectroscopy, Raman spectroscopy, and differential scanning calorimetry. Another filed of expertise of Mafalda Sarraguça is the use of multivariate analysis to improve industrial processes focused on the pharmaceutical industry. Overall, she is the co-author of 38 peer-reviewed publications (more than 800 citations and 16-h index) in international journals, 8 of them as correspondent author. She is also the co-author of 4 invited book-chapters. In the last 5 years she supervised 1 PhD students and several master and research training students and collaborated with the supervision of 2 Master students and 4 research-training students including 4 Erasmus students (2 PhD). She now supervises 2 Master student, and 3 research training students. She has 31 oral communications, being 5 invited, in national and international conferences, 14 of those in the last 5 years. She also has 44 poster presentation 12 of which in the last 5 years. Mafalda Sarraguça participated in six scientific projects has researcher, three nationals and three internationals (one European starting in 2022). She is the co-PI of a FCT project (Honey2KILL). She is a member of COST Action CA18224-Green Chemical Engineering Network towards upscaling sustainable processes in which she is responsible for the COST Tweeter account, and COST Action CA 18112- Mechanochemistry for Sustainable Industry in which she has a role as Gender Balance co-leader and is part of the communication team.

Identification

Personal identification

Full name
Mafalda Sofia Coelho da Cruz Sarraguça

Citation names

Sarraguça, Mafalda
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Websites

https://laqv.requimte.pt/people/475-mafalda_sarraguca (Professional)
https://mafaldasarraguca.owlstown.net/ (Scholar)

Knowledge fields

Exact Sciences - Chemical Sciences

Languages

Language	Speaking	Reading	Writing	Listening	Peer-review
English	Advanced (C1)	Advanced (C1)	Advanced (C1)	Advanced (C1)	Advanced (C1)
French	Beginner (A1)	Beginner (A1)	Beginner (A1)	Beginner (A1)	Elementary (A2)
Portuguese (Mother tongue)					

Education

	Degree	Classification
2011/04/01 - 2017/07/31 Concluded	Post-Doctoral (Pós-doutoramento) Major in Pharmaceutical Sciences REQUIMTE LAQV Porto, Portugal	
2006/10/01 - 2010/12/06 Concluded	PhD in Pharmaceutical Sciences (Doutoramento) Major in Pharmaceutical Sciences - Analytical Chemistry Universidade do Porto Faculdade de Farmácia, Portugal *"Improved quality control of solid dosage forms for the pharmaceutical industry with high-throughput vibrational spectroscopy" (THESIS/DISSERTATION)*	Approved with distinction

2002/09/01 - 2004/06/21 Concluded	Master in Chemistry - Quality Control (Mestrado) Major in Chemical Sciences Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal " *Solid state chemistry of betaxolol hydrochloride"* *(THESIS/DISSERTATION)*	Very Good
1995/09/01 - 2000/06/29 Concluded	Graduation in Industrial Chemistry (Licenciatura) Major in Chemical Sciences Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal *"Enthalpy of vaporization of butanediols " (THESIS/DISSERTATION)*	13 valores

Affiliation

Science

	Category Host institution/organization	Employer
2017/08/01 - Current	Researcher (Research) REQUIMTE LAQV Porto, Portugal	Universidade do Porto Instituto de Ciências e Tecnologias Agrárias e Agro-Alimentares, Portugal
2015/10/30 - 2015/11/07	Visiting Researcher (Research) Universidade Federal do Maranhão, Brazil	REQUIMTE LAQV Porto, Portugal
2010/04/01 - 2010/06/30	Visiting Researcher (Research)	Universitat Autònoma de Barcelona, Spain
2009/05/01 - 2009/07/03	Visiting Researcher (Research)	Universiteit Gent, Belgium
2001/01/01 - 2002/12/31	Research Trainee (Research)	Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal

2000/10/01 - 2000/12/15	Visiting Researcher (Research)	Lunds Universitet, Sweden

Teaching in Higher Education

	Category Host institution/organization	Employer
2022/02 - Current	Invited Assistant (University Teacher) Universidade do Porto Faculdade de Farmácia, Portugal	Universidade do Porto Faculdade de Farmácia, Portugal

Other Careers

	Category Host institution/organization	Employer
2010/09/01 - 2010/12/31	Carreiras / Categorias Subsistentes	WorldMetrics, Portugal
2005/01/14 - 2005/03/23	Professor do ensino básico e secundário (Professor do ensino básico e secundário)	Escola Secundária, Dr. António Granjo , Portugal
2004/02/01 - 2004/08/31	Professor do ensino básico e secundário (Professor do ensino básico e secundário)	Escola Secundára da Anadia, Portugal
2003/04/01 - 2003/08/31	Professor do ensino básico e secundário (Professor do ensino básico e secundário)	Escola E.B. 2 3 Jorge de Montemor, Portugal

Others

	Category Host institution/organization	Employer
2005/04/03 - 2005/10/31	Internship	Celbi SA, Portugal
2004/07/16 - 2005/01/15	Internship	Soporcel , Portugal

Projects

Grant

	Designation	Funders
2019/09/30 - 2019/11/22	Laboratório Associado para a Química Verde - Tecnologias e Processos Limpos - UID/QUI/50006/2019 UIDB/50006/2020 Supervisor REQUIMTE LAQV Porto, Portugal	REQUIMTE LAQV Porto, Portugal Concluded
2011/04/01 - 2017/07/31	HIGH-THROUGHPUT SPECTROSCOPIC CHARACTERIZATION OF SOLID FORMS AND COCRYSTALS: IMPROVING PHARMACEUTICAL MANUFACTURING AND ENHANCING PHARMACOLOGICAL PROPERTIES SFRH/BPD/74788/2010 Post-doc	Fundação para a Ciência e a Tecnologia, Portugal Concluded
2006/10/01 - 2010/09/30	MONITORIZAÇÃO AVANÇADA DE ESPECIALIDADES FARMACÊUTICAS POR ESPECTROSCOPIA DE INFRA-VERMELHO PRÓXIMO NIR E RAMAN COM MÉTODOS QUIMIOMÉTRICOS SFRH/BD/32614/2006 PhD Student Fellow Universidade do Porto Faculdade de Ciências, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Concluded

Contract

	Designation	Funders
2022 - Current	Innovative Mechanochemical Processes to synthesize green ACTIVE pharmaceutical ingredients 101057286 Researcher Universidade de Lisboa Centro de Química Estrutural, Portugal	European Union, Belgium Ongoing
2020/05/03 - Current	MechanoChemistry for Sustainable Industry - COST Action CA18112 CA18112 Other European Cooperation in Science and Technology, Belgium	Ongoing

2020/01 - Current	Green Chemical Engineering Network towards upscaling sustainable processes CA18224 Other European Cooperation in Science and Technology, Belgium	Ongoing
2020/01/01 - 2023/12/31	Associated Laboratory for Green Chemistry - Clean Technologies and Processes UIDB/50006/2020 Researcher REQUIMTE LAQV Porto, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Ongoing
2020/01/01 - 2023/12/31	Associated Laboratory for Green Chemistry - Clean Technologies and Processes UIDP/50006/2020 Researcher REQUIMTE LAQV Porto, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Ongoing
2022/01/01 - 2023/06/30	Honey2KILL- Honey-exosomes to fight superbugs EXPL/NAN-MAT/0743/2021 Researcher Rede de Química e Tecnologia Laboratório Associado para a Química Verde, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Ongoing
2020/11/06 - 2022/11/06	Development and characterization of new solid dispersions of drugs used in the treatment of tuberculosis UNIVERSAL-00998/19 Researcher REQUIMTE LAQV Porto, Portugal Universidade do Porto Faculdade de Farmácia, Portugal Universidade Estadual da Região Tocantina do Maranhão, Brazil	Fundação de Amparo à Pesquisa e ao Desenvolvimento Científico e Tecnológico do Maranhão, Brazil Ongoing
2016/11/14 - 2018/11/14	HANSENÍASE - synthesis and characterization of co-crystals of drugs used in the treatment of leprosy 05974/16 Researcher Universidade do Porto Faculdade de Farmácia, Portugal	Fundação de Amparo à Pesquisa e ao Desenvolvimento Científico e Tecnológico do Maranhão, Brazil Concluded
2014/05/13 - 2017/05/16	NOFARMA: Synthesis and spectroscopic characterization of co-crystals and polymorphic forms of drugs widely used by the Brazilian population 00284-14 Researcher Universidade do Porto Faculdade de Farmácia, Portugal	Fundação de Amparo à Pesquisa e ao Desenvolvimento Científico e Tecnológico do Maranhão, Brazil Concluded

2012/02/01 - 2015/02/01	BIOTEXTILE - Sequencing batch reactor biotechnology toward effective textile wastewater treatment Provided by PTCRIS: 120624 Researcher Universidade do Porto Faculdade de Farmácia, Portugal	Fundação para a Ciência e a Tecnologia, I.P., Portugal Concluded
2010/01/22 - 2012/01/22	Colour in medieval illuminated manuscripts: between beauty and meaning Provided by PTCRIS: 104930 Researcher Universidade do Porto Faculdade de Farmácia, Portugal	Fundação para a Ciência e a Tecnologia, I.P., Portugal Concluded
2001/01/01 - 2003/12/31	A Thermodynamic and Spectroscopic Approach to the Study of Intermolecular Interactions in Hydroxylated Organic Compounds PRAXIS/QUI/10137/98 Scientific Initiation Fellow Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Concluded

Outputs

Publications

Book chapter	1	Passos, Marieta L.C.; Sarraguça, Mafalda C.; Saraiva, M. Lúcia M.F.S.; Prasada Rao, T.; Biju, V.M.. "Organic Compounds". In *Encyclopedia of Analytical Science*, 236-243. Elsevier, 2019. Published • 10.1016/b978-0-12-409547-2.14465-8
	2	Lopes, João A.; Sarraguça, Mafalda C.. "Data Processing in Multivariate Analysis of Pharmaceutical Processes". In *Multivariate Analysis in the Pharmaceutical Industry*, 35-51. Elsevier, 2018. Published • 10.1016/b978-0-12-811065-2.00002-3
	3	Mafalda C. Sarraguca; Ricardo Pascoa; Miguel Lopo; Jorge Sarraguca; Joao A. Lopes. "Bioactive Compounds in Coffee as Health Promotors". In *Natural Bioactive Compounds from Fruits and Vegetables as Health Promoters Part II*, 180-220. BENTHAM SCIENCE PUBLISHERS, 2016. Published • 10.2174/9781681082431116010011
	4	Páscoa, R.N.M.J.; Sarraguça, M.C.; Magalhães, L.M.; Santos, J.R.; Rangel, A.O.S.S.; Lopes, J.A.. "Use of Near-Infrared Spectroscopy for Coffee Beans Quality Assessment". In *Disease Prevention and Health Promotion*, 933-941. Academic Press, 2015. Published • 10.1016/B978-0-12-409517-5.00103-0
Conference abstract	1	Marisa Freitas; Carina Proença; Sarraguça C. Mafalda; Daniela Ribeiro; Eduarda Fernandes. "Assessment of HOCl Production in Human blood: Experimental Optimization and Proof of Concept for the Antioxidant Activity of Flavonoids in this Complex Matrix". Paper presented in *27th Annual Conference of the Society for Redox Biology and Medicine*, 2020.

Published

	2	Daniela Ribeiro ; Tânia Soares; Sílvia Rocha; Sarraguça, Mafalda; Eduarda Fernandes; Marisa Freitas. "Optimization of experimental settings for the assessment of HOCl in human blood, using the fluorescent probe APF". Paper presented in *19th Biennial Meeting for the Society for Free Radical Research International (SFRRI)*, *Lisboa*, 2018. Published
Conference poster	1	Sarraguça C. Mafalda; Sousa, Marcus Lima; Adenilson Santos; Jorge Sarraguça; João Almeida Lopes; da Silva Ribeiro, Paulo Roberto. Corresponding author: Sarraguça C. Mafalda. "Multicomponent forms of Clofazimine by mechanochemistry". Paper presented in *10th International Conference on Mechanochemistry and Mechanical Alloying*, 2022.
	2	Marisa Freitas; Carina Proença; Sarraguça C. Mafalda; Daniela Ribeiro; Eduarda Fernandes. "Assessment of HOCl Production in Human blood: Experimental Optimization and Proof of Concept for the Antioxidant Activity of Flavonoids in this Complex Matrix". Paper presented in *27th Annual Conference of the Society for Redox Biology and Medicine*, 2020.
	3	André R. T. S. Araujo; Sarraguça, Mafalda; Márcio Rodrigues; Maximiano Prata Ribeiro; Paula Coutinho; Elena Falqué. "Physico-chemical fingerprinting of mineral medicinal waters of Ourense (Galicia)". Paper presented in *International Symposium on Thermalism and Quality of Life (STCV-2019)*, 2019.
	4	Marisa Rodrigues; João Almeida Lopes; João Figueirinhas; Carlos Cruz; Alexandra Guedes; Sarraguça, Mafalda. "High-throughput screening of hydrochlorothiazide cocrystals by vibrational spectroscopy". Paper presented in *XXVI Meeting of the National Portuguese Chemical Society*, 2019.
	5	Renato Gil; Sarraguça, Mafalda; Célia Amorim; Conceição Montenegro; Alberto Araújo. "Lithium determination in human serum with improved accuracy using potentiometric detection". Paper presented in *XXVI Meeting of the National Portuguese Chemical Society*, 2019.
	6	Marisa Rodrigues; Joao A. Lopes; Mafalda Sarraguca. Corresponding author: Marisa Rodrigues. "Pharmaceutical cocrystallization techniques. Advances and Chalanges". Paper presented in *XXIV Meeting Galitian-Portuguese of Chemistry*, 2018.
	7	Ana Silva; Mafalda Sarraguca (presenter); M. Fonteyne; J. Vercruysse; F. De Leersnyder ; V. Vanhoorne; N. Bostijn; et al. "Multivariate statistical process control of a continuous pharmaceutical twin-screw granulation and fluid bed drying process". Paper presented in *EuPAT 9 - Nineth pan-European QbD &PAT Science Conference European*, 2018.
	8	Pedro Cruz; João A. Lopes; Mafalda Sarraguca. "Synthesis of co-amorphous drugs by freeze-drying of low solubility drugs". Paper presented in *XXV Meeting of the National Portuguese Chemical Society*, 2017.

9 Marisa Rodrigues; Joao A. Lopes; Mafalda Sarraguca. "Cocrystallization screening of new hydrochlorothiazide cocrystals". Paper presented in *XXV Meeting of the National Portuguese Chemical Society*, 2017.

10 Silvério Ferreira Silva Filho ; Andreia Cardoso Pereira; Jorge Sarraguca; Mafalda Sarraguca; Joao A. Lopes; Pedro Freitas Filho ; Adenilson Santos; Paulo Roberto S. Ribeiro. "Crystallographic, thermodynamic and spectroscopic characterization of glibenclamide:tromethamine 1:1 cocrystal synthesized by slow evaporation". Paper presented in *XXV Meeting of the National Portuguese Chemical Society*, 2017.

11 Tânia Soares; Carina Proença; Mafalda Sarraguca; Eduarda Fernandes; Marisa Freitas. "Optimization of experimental settings for the analysis of reactive oxygen and nitrogen species production in human blood using DCFH-DA". Paper presented in *IJUP 17- Tenth Meeting of Young Researcher of University of Porto*, 2017.

12 Pedro Cruz; Mafalda Sarraguca. "Synthesis and quality control of new drugs with improved solubility: co-amorphization by freeze-drying of low solubility drugs". Paper presented in *IJUP 17- Tenth Meeting of Young Researcher of University of Porto*, 2017.

13 Marisa Rodrigues; Mafalda Sarraguca. "Optimization of cocrystallization processes. Cocrystallization by solvent evaporation and microwave assisted". Paper presented in *IJUP 17- Tenth Meeting of Young Researcher of University of Porto*, 2017.

14 Bárabra Baptista ; Mafalda Sarraguca (presenter); Joao A. Lopes. "Synthesis, characterization and use in a formulation of glibenclamide and gliclazide cocrystals". Paper presented in *EuPAT 8 - Eight pan-European QbD &PAT Science Conference European*, 2016.

15 Mafalda Sarraguca (presenter); Paulo Roberto S. Ribeiro; Adenilson Santos; João A. Lopes. "Monitoring of a cocrystallization process with process analytical technology". Paper presented in *XX Meeting Galitian-Portuguese of Chemistry*, 2014.

16 Nídia Lourenço ; Mafalda Sarraguca (presenter); Helena Pinheiro; João A. Lopes. "A process analytical technology approach for the in-situ monitoring of sequencing batch reactors treating dye-laden textile wastewater". Paper presented in *XX Meeting Galitian-Portuguese of Chemistry*, 2014.

17 Mafalda Sarraguca (presenter); Paulo Roberto S. Ribeiro; João A. Lopes. "A PAT approach for the on-line monitoring of pharmaceutical co-crystals formation with near infrared spectroscopy". Paper presented in *EuroPACT 2014 - 3rd European Conference on Process Analytics and Control Technology*, 2014.

18 Mafalda Sarraguca; Paulo Roberto S. Ribeiro; Rita Matias; Joao A. Lopes. "Quality-by-design applied to dissolution tests: in-situ NIR spectroscopy monitoring". Paper presented in *EuPAT 6 - Sixth pan-European QbD &PAT Science Conference European*, 2013.

19 Mafalda Sarraguca (presenter); Paulo Roberto S. Ribeiro; Rita Matias; João A. Lopes. "A new simple and sensitive spectrophotometric method for the determination of folic acid in pharmaceutical formulations". Paper presented in *XXIII Meeting of the National Portuguese Chemical Society.*, 2013.

20 Raquel Figueiredo; Rita Matias; Mafalda Sarraguca; João A. Lopes. "A PAT/QbD approach for in-situ monitoring of drug dissolution tests with NIR spectroscopy". Paper presented in *XVIII Meeting Galitian-Portuguese of Chemistry*, 2012.

21 Raquel Figueiredo; Mafalda Sarraguca; Jorge Salvador; Joao A. Lopes. "NIR diffuse reflectance spectroscopy to assess tablets dissolution profiles". Paper presented in *EuPAT 5 - Fifht pan-European QbD &PAT Science Conference European*, 2012.

22 Sarraguça, Mafalda; Mafalda Sarraguca; Jorge Salvador; João A. Lopes. "A new trend for NIR spectroscopy: in-situ monitoring of dissolution tests". Paper presented in *EuPAT 5 - Fifht pan-European QbD &PAT Science Conference European*, 2012.

23 João Santos; Mafalda Sarraguca (presenter); João A. Lopes; António O.S.S. Rangel. "Evaluation of green coffee quality using NIR spectroscopy: a quantitative approach". Paper presented in *XVII Meeting Galitian-Portuguese of Chemistry*, 2011.

24 Rodrigo Santos; Mafalda Sarraguca; João A. Lopes; António O.S.S. Rangel. "Authenticity assessment of roasted coffee brands using near infrared spectroscopy". Paper presented in *XVII Meeting Galitian-Portuguese of Chemistry*, 2011.

25 Mafalda Sarraguca (presenter); Joao A. Lopes. "Improved quality control of solid dosage forms for the pharmaceutical industry with high-throughput near infrared spectroscopy". Paper presented in *XXII Meeting of the National Portuguese Chemical Society*, 2011.

26 Sandra Soares; Helena Amara ; Paulo Costa; Mafalda Sarraguca; João A. Lopes. "Near infrared spectroscopy for polymorphism characterization in pharmaceutical solid dosage forms". Paper presented in *IJUP 11- Fourth Meeting of Young Researcher of University of Porto*, 2011.

27 Carla P. Coutinho; Mafalda Sarraguca; Jorge Sarraguca; Luís Meirinhos-Soares; Mónica Miranda; Raquel Guiomar; Jorge Machado; et al. "Fourier-transform infrared spectroscopy in bacteriology". Paper presented in *REQUIMTE National Meeting*, 2011.

28 Mafalda Sarraguça (presenter); Ana Cruz; Helena Amaral; Paulo Costa; Joao A. Lopes; Mafalda Sarraguca; João A. Lopes. "Particle size determination in pharmaceuticals by near infrared spectroscopy". Paper presented in *VII Colloquium Chemiometricum Mediterraneum*, 2010.

29 Mafalda Sarraguca; Cristina Leandro; Joao A. Lopes. "High-throughput pharmaceutical process quality control (PAT): practical implementation and revenue". Paper presented in *EuPAT 4 - Fourth pan-European QbD &PAT Science Conference*, 2010.

30 Ana Cruz; Mafalda Sarraguça; Paulo Costa; Helena Amaral; Joao A. Lopes. "Using NIR to a deep understanding of pharmaceutical powders physical properties". Paper presented in *IJUP 10 - Third Meeting of Young Researcher of University of Porto*, 2010.

31 Sandra Soares; Mafalda Sarraguca; Paulo Costa; Helena Amaral; João A. Lopes. "NIR for polymorphism characterization and quantifcation in pharmaceutical dosage forms". Paper presented in *IJUP 10 - Third Meeting of Young Researcher of University of Porto*, 2010.

32 Mafalda Sarraguca (presenter); João A. Lopes. "A novel method to determine aminoglycosides in pharmaceutical solid formulations". Paper presented in *14th Internatioanal Conference on Near Infrared Spectroscopy*, 2009.

33 Ana Cruz; Sandra Soares; Mafalda Sarraguca; Paulo Costa; Helena Amaral; Joao A. Lopes. "Advanced control of pharmaceutical specialties with near infrared spectroscopy". Paper presented in *IJUP 09 - Second Meeting of Young Researcher of University of Porto.*, 2009.

34 Sandra Soares; Mafalda Sarraguca; Paulo Costa; Helena Amaral; João A. Lopes. "Analysis of UV degradation of active pharmaceutical ingredients in powder form with near infrared spectroscopy". Paper presented in *IJUP09 - Second Meeting of Young Researcher of University of Porto.*, 2009.

35 Mafalda Sarraguca; Ana Cruz; Sandra Soares; Paulo Costa; Helena Amaral; Joao A. Lopes. "Determination of physical parameters in pharmaceutical powders by near infrared spectroscopy". Paper presented in *19th International Symposium on Pharmaceutical and Biomedical Analysis*, 2008.

36 Adriano Fachini; Mafalda Sarraguca; Joao A. Lopes. "Unveiling chemical and physical information from chemometrics models". Paper presented in *XXI Meeting of the National Portuguese Chemical Society*, 2008.

37 A. Paulo; A. Dias; Mafalda Sarraguca; Joao A. Lopes; M. Alves; E. C. Ferreira. "Surveying an activated sludge reactor using online UV-visible and NIR spectroscopy and chemometrics". Paper presented in *SIDISA 08 - Proceedings of the International Symposium on Sanitary and Environmental Engineering*, 2008.

38 Mafalda Sarraguca; João A. Lopes. "The use of net analyte signal (NAS) in NIR Spectroscopy: interpretability and figures of merit". Paper presented in *CAC2008 -11th International Conference on Chemometrics in Analytical Chemistry*, 2008.

	39	Ana Cruz; Sandra Soares; Mafalda Sarraguca; Paulo Costa; Helena Amaral; Joao A. Lopes. "Determination of physical parameters in pharmaceutical powders by near infrared spectroscopy". Paper presented in *IJUP 08 - First Meeting of Young Researcher of University of Porto*, 2008.
	40	Mafalda Sarraguca (presenter); Joao A. Lopes. "Quality control of pharmaceuticals with NIR: from lab to process line". Paper presented in *13th Internatioanal Conference on Near Infrared Spectroscopy*, 2007.
	41	João Canotilho; Mafalda Cruz; Maria Luísa Planas Leitão ; Adriano Sousa; J. Redinha. "Thermospectroscopic studies in the stretching region of betaxolol and betaxolol hydrochloride". Paper presented in *7th International Conference/Workshop on Pharmacy and Applied Physical Chemistry*, 2003.
	42	Mafalda Cruz (presenter); João Canotilho; Maria Luísa Planas Leitão. "Structural modifications in betaxolol hydrochloride on heating/cooling cycles". Paper presented in *6th Mediterranean Conference on Calorimetry and Thermal Analysis*, 2003.
	43	Maria Luísa Planas Leitão ; Mafalda Cruz; João Canotilho. "Thermal behaviour of betaxolol". Paper presented in *8th European Symposium on Thermal Analysis and Calorimetry*, 2002.
	44	Paula Barreleiro; Mafalda Cruz; S. Ferreira; G. Olofsson. "Factors influencing the energetics of DNA-cationic vesicle formation". Paper presented in *XV Conference of the European Colloid & Interface Society - ECIS*, 2001.
	45	Ermelinda Eusébio ; Lopes Jesus, A.J.; M.T.S. Rosado; Mafalda Cruz; Maria Luísa Planas Leitão ; Redinha, J.S.. "Butanediols: enthalpies of vaporization and gas state molecular structure". Paper presented in *12th International Congress on Thermal Analysis and Calorimetry*, 2000.
Encyclopedia entry	1	André, Vânia; Duarte, M. Teresa; Clara S. B. Gomes; Mafalda Sarrguça. Corresponding author: Mafalda Sarrguça. "Mechanochemistry in Portugal". In *Encyclopedia: Where Brilliant Minds Gather*. MDPI, 2022. https://encyclopedia.pub/19902. Published
Journal article	1	R. Sá, Mônica; Sarraguça, Jorge M.G.; de Sousa, Francisco F.; Sarraguça, Mafalda S.C.; Lopes, João A.; Lima, Antonio Douglas da S.G.; Lage, Mateus R.; Ribeiro, Paulo R.S.. Corresponding author: Ribeiro, Paulo R.S.. "Structural, thermal, vibrational, solubility and DFT studies of a tolbutamide co-amorphous drug delivery system for treatment of diabetes". *International Journal of Pharmaceutics* 615 (2022): 121500. http://dx.doi.org/10.1016/j.ijpharm.2022.121500. 10.1016/j.ijpharm.2022.121500
	2	Sarraguça, Mafalda C.; Ribeiro, Paulo R. S.; Nunes, Cláudia; Seabra, Catarina Leal. Corresponding author: Sarraguça, Mafalda C.. "Solids Turn into Liquids-Liquid Eutectic Systems of Pharmaceutics to Improve Drug Solubility". *Pharmaceuticals* 15 3 (2022): 279. http://dx.doi.org/10.3390/ph15030279. Published • Open access • 10.3390/ph15030279

3 Teresa Paiva; Telma A. Jacinto; Sarraguça C. Mafalda; Paula Coutinho. Corresponding author: Teresa Paiva. "Beef Consumers Behaviour and Preferences - The Case of Portugal". *Sustainability* 14 2358 (2022): 1-21. https://www.mdpi.com/2071-1050/14/4/2358.

Published • Open access

4 André, Vânia; Duarte, M. Teresa; Gomes, Clara S. B.; Sarraguça, Mafalda C.. Corresponding author: Sarraguça, Mafalda C.. "Mechanochemistry in Portugal: A Step towards Sustainable Chemical Synthesis". *Molecules* 27 1 (2021): 241. http://dx.doi.org/10.3390/molecules27010241.

Published • Open access • 10.3390/molecules27010241

5 Queiroz, Ana Luiza P.; Rodrigues, Marisa; Zeglinski, Jacek; Crean, Abina M.; Sarraguça, Mafalda Cruz ; Vucen, Sonja. Corresponding author: Sarraguça, Mafalda Cruz. "Determination of co-crystal phase purity by mid infrared spectroscopy and multiple curve resolution". *International Journal of Pharmaceutics* 595 (2021): 120246. http://dx.doi.org/10.1016/j.ijpharm.2021.120246.

Published

6 Moreira, Miguel; Cruz Sarraguça, Mafalda. Corresponding author: Cruz Sarraguça, Mafalda. "How can oral paediatric formulations be improved? A challenge for the XXI century". *International Journal of Pharmaceutics* 590 (2020): 119905. http://dx.doi.org/10.1016/j.ijpharm.2020.119905.

Published • 10.1016/j.ijpharm.2020.119905

7 Sousa, Marcus Lima; Sarraguça, Mafalda C.; Oliveira dos Santos, Adenilson; Sarraguça, Jorge M.G.; Lopes, João; S Ribeiro, Paulo Roberto. "A new salt of clofazimine to improve leprosy treatment". *Journal of Molecular Structure* 1214 (2020): 128226. http://dx.doi.org/10.1016/j.molstruc.2020.128226.

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Thesis / Dissertation

1 Sarraguça, Mafalda. "Improved Quality Control of Solid Dosage Forms for the Pharmaceutical Industry with High-Throughput Vibrational Spectroscopy". PhD, Universidade do Porto Faculdade de Farmácia, 2006.

2 Sarraguça, Mafalda. "Solid state chemistry of betaxolol hydrochloride". Master, Universidade de Coimbra Faculdade de Ciencias e Tecnologia, 2004.

Activities

Oral presentation

	Presentation title	Event name Host (Event location)
2022/02/28	Improvement of pharmaceutical formulations for tuberculosis treatment	CA18224 GREENERING Scientific meeting GREENERING COST Action (CA18224) (Coimbra, Portugal)
2022/02/24	Multicomponent forms to improve active pharmaceutical ingredients physicochemical properties	Research Seminar Series - Hilary Term 2021/22 Trinity College Dublin - School of Pharmacy and Pharmaceutical Sciences (Ireland)
2022/02/11	Gender Balance Activities in COST Action CA18112	Webinar COST Action CA 18112 - Mechanochemistry for Sustainable Industry COST Action 18112
2021/10/08	Mechanochemistry applied to pharmaceutical multicomponent synthesis	Greenering Webinar Series - When industry meets academia COST Action 18224 - Green Chemical Engineering Network towards upscaling sustainable processes
2021/03/25	Practical applications of IR and Raman spectroscopies in multicomponent reactions	Training School - Mechanochemistry: from supramolecular to covalent bonds - synthesis and structural characterization COST Action CA18112 Mechanochemistry for Sustainable Industry (Lisbon, Portugal)
2021/02/15	Solids turn into liquids. Eutectic mixtures of pharmaceutics to improve drug solubility	1st GREENERING International Conference GREENERING COST Action (CA18224) (Almada)
2020/07/10	Multivariate Data Analysis in Co-Crystals Development	Webinar COST Action CA 18112 - Mechanochemistry for Sustainable Industry COST Action 18112

2020/02/13	Cocrystallization of olanzapine a way to improve chemical and physical stability	IJUP 2020- Thirteenth Meeting of YoungResearcher of University of Porto.© University of Porto (Portugal, Portugal)
2019/11/26	Cocrystallization of olanzepine a way to improve chemical and physical stability	SIFFUP - Research symposium Students Association Pharmacy Faculty, University of Porto (Porto, Portugal)
2018/11	Hydrochlorothiazide cocrystals screening: a vibrational spectroscopy study	XXIVMeeting Galitian-Portuguese of Chemistry National Portuguese Chemical Society (SPQ) (Porto, Portugal)
2018/04	Dynamic modelling of granules size distribution produced by a continuous manufacturing process with autoregressive neural networks	EuPAT 9 - Nineth pan-European QbD &PAT Science Conference European European Federation for Pharmaceutical Sciences (EUFEPS) (Manchester, United Kingdom)
2018/03	NIR and Raman spectroscopy as tools to assure olanzapine stability in formulations	11th, World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology International Association for Pharmaceutical Technology (Granada, Spain)
2017/11	New hydrochlorothiazide cocrystals: scale-up and charcterization	XXII Meeting Galitian-Portuguese of Chemistry Colegio Oficial De Químicos da Galicia (Ferrol, Spain)
2017/02	Determination of zonisamide in human plasma using microextraction by packed sorbent and high performance liquid chromatography-diode array detection	XLVII Anual Metting of the Portuguese Farmacology Society Portuguese Farmacology Society (Coimbra, Portugal)
2016/11	Synthesis and characterization of pharmaceutical cocrystals of glibenclamide and gliclazide	XXII Meeting Galitian-Portuguese of Chemistry Portuguese Society of Chemistry (SPQ) (Bragança, Portugal)
2016/10	Batch statistical process control of cocrystallization processes: a comparison between PLS and OPLS	EuPAT 8 - Eigth pan-European QbD & PAT Science Conference European Federation for Pharmaceutical Sciences (EUFEPS) (Cork, Ireland)
2016/06	Comparison between PLS and OPLS to batch process monitoring of cocrystallization processes	8º Meeting of Analytical Chemistry Division Portuguese Chemical Society (Lisboa, Portugal)

2015/11	Vibrational spectroscopy applied to the synthesis and characterization of pharmaceutical cocrystals with industrial relevance	III NUPFARQ Symposium Maranhão Federal University (Imperatriz, Brazil)
2015/06	Furosemide and p-aminobenzoic acid cocrystals. A near infrared spectroscopy study	XXIV Meeting of the National Portuguese Chemical Society Portuguese Chemical Society (SPQ) (Coimbra, Portugal)
2015/05	Near infrared spectroscopy as a PAT tool to monitor cocrystallizations	EuPAT 7- Seventh pan-European QbD & PAT Science Conference European Federation for Pharmaceutical Sciences (EUFEPS) (Graz, Austria)
2014/09	Near infrared spectroscopy as a PAT tool to monitor online cocrystallizations	8th Annual Symposium of Pharmaceutical Solid State Research Cluster (PSSRC) University of Ljubljana (Ljubljana, Slovenia)
2014/04	Optimizing multivariate regression models based on heterogeneous samples near infrared spectra	6º Meeting of Analytical Chemistry Division Portuguese Chemical Society (SPQ) (Coimbra, Portugal)
2011/11	Differentiation of Acinetobacter spp. with intrinsic fluorescence spectroscopy	XVII Meeting Galitian-Portuguese of Chemistry Colegio Oficial De Químicos da Galicia (Pontevedra, Spain)
2011/06	A batch modelling approach to monitor a freeze-drying process using in-line Raman spectroscopy	3rd PharmSciFair European Federation for Pharmaceutical Sciences (EUFEPS) (Praga, Czech Republic)
2010/11	High-throughput pharmaceutical process quality control (PAT/QbD): a challenge for analytical chemistry	V Congresso Iberoamericano de Química Analítica X Encuentro Nacional de Química Analítica y Ambiental (Concón, Chile)
2010/06	Bioreactor monitoring with spectroscopy and chemometrics: a review	VII Colloquium Chemiometricum Mediterraneum Granada University (Granada, Spain)
2009/11	NIR as a multitasking technique in the pharmaceutical field	14th Internatioanal Conference on Near Infrared Spectroscopy International Council for Near Infrared Spectroscopy (Banguecoque, Thailand)

2008/09	High-throughput pharmaceutical process monitoring: integrating the hardware and software components	10th International Chemical & Biological Engineering Conference Minho University (Braga, Portugal)
2008/06	High-throughput pharmaceutical process quality control (PAT): practical implementations and revenue	19th International Symposium on Pharmaceutical and Biomedical Analysis Pharmaceutical and Biomedical Analysis Steering Commitiee (Gdansk, Poland)
2007/06	Chemometrics in NIR spectroscopy pharmaceutical applications	13th Internatioanal Conference on Near Infrared Spectroscopy International Council for Near Infrared Spectroscopy (Umea, Sweden)
2007/03	Chemometrics in vibrational spectroscopy pharmaceutical applications	6º Meeting of Analytical Chemistry Division Portuguese Chemical Society (SPQ) (Lisboa, Portugal)

Supervision

	Thesis Title Role	Degree Subject (Type) Institution / Organization
2022/02/01 - Current	Therapeutic Liquid Eutectic Systems as a drug vehicle for tuberculosis treatment Supervisor of Cláudia Isabel Vareiro Marques	Bioquímica (Degree) Universidade do Porto Faculdade de Farmácia, Portugal Universidade do Porto Faculdade de Ciências, Portugal
2021/09/01 - Current	Desenvolvimento de solventes verdes para utilização na indústria farmacêutica e cosmética Supervisor of Cátia Ferreira	Controlo da Qualidade (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2022/02/02 - 2022/09/13	Desenvolvimento de solventes verdes para utilização na indústria farmacêutica Supervisor of Catarina Filipa Martins Carvalho	Ciências Farmacêuticas (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2020/09/01 - 2022/07/22	Development of green solvents for the pharmaceutical industry Supervisor of Constatino Coelho	Controlo de Qualidade (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2021/07/10 - 2022/06	Curso Secundário com Planos Próprios de Análises Químico-Biológicas Supervisor of David Moreira	Planos Próprios de Análises Químico-Biológicas (Specialization course) Universidade do Porto Faculdade de Farmácia, Portugal Colégio de Gaia, Portugal

2021/09/01 - 2022/02/11	Melhoramento de formulações farmacêuticas para o tratamento da tuberculose em crianças Supervisor of Helena Sofia Ribeiro Monteiro	Mestrado Integrado em Ciências Farmacêuticas (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2020/11 - 2021/07	Enhancement of pharmaceutical formulations for the tratment of tubercolosis in children Supervisor of Joana Catarina Martins Gonçalves	Bioquímica (Degree) Universidade do Porto Faculdade de Ciências, Portugal Universidade do Porto Instituto de Ciências Biomédicas Abel Salazar, Portugal
2020/09 - 2021/02/08	Synthesis of new multicomponent forms of the drug (S,S)-Ethambutol Supervisor of Rafael Gomes	Mestrado Integrado em Ciências Farmacêuticas (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2018/11/01 - 2020	Thermal study of the cocrystals of Glibenclamide Supervisor of Ana Beatriz Almeida	Ciências Farmacêuticas (Scientific initiation) Universidade do Porto Faculdade de Farmácia, Portugal
2019/09 - 2019/11	Development of sweet cocrystals for pharmaceutical applications Supervisor	(Specialization course) REQUIMTE LAQV Porto, Portugal Universidade do Porto Faculdade de Farmácia, Portugal
2019/02/12 - 2019/07/31	Study of new co-amorphous materials Supervisor of Luís Diogo Pinheiro	Ciências Farmacêuticas (Scientific initiation) Universidade do Porto Faculdade de Farmácia, Portugal
2016/09 - 2019/07/31	High-throughput screening of hydrochlorothiazide cocrystals by vibrational spectroscopy Supervisor of Marisa Abreu Rodrigues	Controlo de Qualidade (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2018/11/01 - 2019/06	Study of glibenclamide p-aminobenzoic acid cocrystals Supervisor of Rita Lima	Bioquímica (Degree) Universidade do Porto Faculdade de Ciências, Portugal Universidade do Porto Instituto de Ciências Biomédicas Abel Salazar, Portugal
2018/02 - 2018/10/28	Scale-up and high-throughput monitoring of cocrystallisation processes Co-supervisor of Inês Pecêgo	Engenharia Farmacêutica (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal
2011/09 - 2017/10/02	Process analytical technology for batch and continuous pharmaceutical process supervision	Ciências Farmacêuticas (PhD) Universidade do Porto Faculdade de

	Co-supervisor of Ana Filipa Tavares da Silva	Farmácia, Portugal Universiteit Gent, Belgium
2016/02/01 - 2017/09/07	From synthesis to formulation of gliclazide and glibenclamide cocrystal pharmaceutical solid dosage forms Co-supervisor of Bárbara Violinha Baptista	Engenharia Farmacêutica (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal
2015/09 - 2016/07	On-line monitoring of a cocrystallization process between hydrochlorothiazide and p-aminobenzoic acid using near infrared spectroscopy Co-supervisor of Carolina Janardo Ribeiro	Ciências Farmacêuticas (Other) Universidade de Lisboa Faculdade de Farmácia, Portugal

Event organisation

	Event name Type of event (Role)	Institution / Organization
2022/02/28 - 2022/03/02	CA18224 GREENERING Scientific meeting. This 3-day meeting aims to bring together in person the participants of the Greenering network. After two years of online work, it is our belief that personal connections must be re-established and encouraged. (2022/02/28 - 2022/03/02) Meeting (Member of the Organising Committee)	Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal
2021/02/11 - 2021/02/11	Perspectives on Gender Balance in STEM (online event) - COST Action 18112 MechanoChemistry for Sustainable Industry (2021/02/11 - 2021/02/11) Round table (Co-organisor)	European Cooperation in Science and Technology, Belgium
2013/06 - 2013/09/24	Scientific committee member of the EuPAT6 conference (2013/09/22 - 2013/09/24) Congress (Member of the Organising Committee)	Universidade do Porto Faculdade de Farmácia, Portugal
2001/06 - 2001/09/21	Collaboration on the organization of the XV European Colloid and Interface Society Conference (2001/09/16 - 2001/09/21) Congress (Other)	Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal

Event participation

	Activity description Type of event	Event name Institution / Organization
2021/09 - 2022/04	The University of Porto presents the Introduction to University Teaching initiative, a Training Cycle aimed at teachers at the beginning of their careers. The course 15 modules with a duration of 77 hours. Workshop	Introdução à docência universitária - ciclo de formações da U.Porto Universidade do Porto, Portugal
2022/02/28 - 2022/03/02	The next CA18224 GREENERING Scientific meeting will be held in Coimbra (Portugal) on February 28th and March 1st, 2022, in organization of local host committee. Meeting	CA18224 GREENERING Scientific meeting COST Action 18224 - Green Chemical Engineering Network towards upscaling sustainable processes, Portugal
2021/11/04 - 2021/11/04	Pedagogic conference Pharmacy Faculty, University of Porto Conference	Pedagogic conference Pharmacy Faculty, University of Porto Universidade do Porto Faculdade de Farmácia, Portugal
2021/02/17 - 2021/02/18	Mechanochemistry Meets Industry - Mechanochemistry for Sustainable Industry - online event - COST Action CA18112 - strives to advance cooperation between industrial partners and academic researchers to facilitate integration of mechanochemistry into chemical processes at both R&D phase and production scale. Symposium	Mechanochemistry Meets Industry European Cooperation in Science and Technology, Belgium
2020/09/17 - 2020/09/18	Encontro Online REQUIMTE Meeting	Encontro Nacional REQUIMTE REQUIMTE LAQV Porto, Portugal
2020/02/17 - 2020/02/18	1st Join meeting COST Action CA18224 Meeting	1st Join meeting COST Action CA18224 COST Action 18224 , Portugal
2019/10/21 - 2019/10/25	Modern Methods of Structure Elucidation (MMSE) is the annual national training site on modern spectroscopic analytical techniques intended for Bachelor, Master and Ph.D. Students, Post-docs and Young Researchers from the Universities, as well as Researchers/Spectroscopists from the Industrial Laboratories across the country. This event is organized by the Centro de Química Estrutural – Instituto Superior Técnico – Universidade de Lisboa (CQE–IST), in collaboration with the IST/ITN .	National Training Site on Modern Methods of Structure Elucidation - 2019 Universidade de Lisboa Instituto Superior Técnico, Portugal

	Workshop	
2017/04/06 - 2017/04/06	Seminar Retsch – The art of grinding and dynamic image analysis Seminar	The art of grinding and dynamic image analysis Retsch GmbH, Germany
2016/02/04 - 2016/02/05	Encontro REQUIMTE Meeting	Encontro Nacional do REQUIMTE REQUIMTE LAQV Porto, Portugal
2015/09/13 - 2015/09/13	Seminary in XRD solutions Seminar	ECS Transactions Paralab, Portugal
2015/05/05 - 2015/05/05	Seminary, BTC Europe Seminar	BTC Customer seminar Universidade de Lisboa Faculdade de Farmácia, Portugal
2015/02/25 - 2015/02/25	Conference in Nanoparticles in modern analytical chemistry Conference	Nanoparticles in modern analytical chemistry Universidade do Porto Faculdade de Farmácia, Portugal
2013/04/02 - 2013/04/02	Conference in Biodisel Conference	Conference in Biodisel in Brazil Universidade do Porto Faculdade de Farmácia, Portugal
2008/05/20 - 2008/05/20	Seminary Ecoanalytix. Seminar	Seminary Ecoanalytix PerkinElmer Inc, United States
2006/11/20 - 2006/11/22	Workshop in Pharmaceutical Quality Management Workshop	Workshop in Pharmaceutical Quality Management Ordem dos Farmaceuticos, Portugal
2006/10/24 - 2006/10/24	Hands-on workshop on FTIR, NIR, Raman and TD-NMR Workshop	Hands-on workshop on FTIR, NIR, Raman and TD-NMR Bruker Optics Inc, United States
2006/01/02 - 2006/04/30	Post-graduation in Entrepreneurship and Business Management Other	Entrepreneurship and Business Management Centro de Emprego e Formação Profissional , Portugal
2003/04 - 2003/06	Post-graduation in Quality Management System Other	Quality Management System AEMITEQ - Associação Para A Inovação Tecnologica E Qualidade, Portugal
2003/01 - 2003/03	Post-graduation in chemical quality control of water Other	Chemical quality control of water AEMITEQ - Associação Para A Inovação Tecnologica E Qualidade, Portugal

Jury of academic degree

	Theme Role	Candidate name (Type of degree) Institution / Organization
2022/07/22	Implementation of green chemistry in the pharmaceutical industry. New challenges for the XXI century. Supervisor	Constantino Coelho (Other) Universidade do Porto Faculdade de Farmácia, Portugal
2022/07/20	FTIR-ATR analysis of Covid-19 blood plasma for immunological biochemical indicators estimation (Thesis) Main arguer	Alexandra Raquel Moreira Martins (Other) Universidade de Lisboa Faculdade de Farmácia, Portugal
2022/07/13	Development of green solvents for pharmaceutical industry Supervisor	Catarina Carvalho (Other) Universidade do Porto Faculdade de Farmácia, Portugal
2022/02/11	Melhoramento de formulações farmacêuticas para o tratamento da tuberculose em crianças Supervisor	Helena Sofia Ribeiro Monteiro (Other) Universidade do Porto Faculdade de Farmácia, Portugal
2021/11/18	A reverse engineering approach for the quantitative evaluation of a liquid dosage form using FT-IR spectroscopy and chemometric tools (Thesis) Main arguer	Carolina Mendes Oliveira (Master) Universidade de Lisboa Instituto Superior Técnico, Portugal
2021/10/05	Development of a Resveratrol Solid Dispersion with Enhanced Oral Bioavailability by the Lyophilization Method (Thesis) Main arguer	Hugo Miguel Ferreira Almeida (Other) Universidade do Porto Instituto de Ciências Biomédicas Abel Salazar, Portugal
2021/07/22	IONIC LIQUIDS, GUMBOS AND NANOGUMBOS AS STRATEGY TO CONTROL ANTIMICROBIAL RESISTANCE (Thesis) Main arguer	Fábio Miguel Santos Costa (Other) Universidade do Porto Faculdade de Farmácia, Portugal
2021/05/07	Improvement of pharmaceutical formulations for tubercolosis treatment Supervisor	Joana Catarina Martins Gonçalves (Other) Universidade do Porto Faculdade de Ciências, Portugal Universidade do Porto Instituto de Ciências Biomédicas Abel Salazar, Portugal
2021/02/08	Synthesis of new multicomponent forms of the drug (S,S)-Ethambutol Supervisor	Rafael Silveira Gomes (Other) Universidade do Porto Faculdade de Farmácia, Portugal
2020/11/26	Quality Risk Management, its tools and practical applications (Thesis) Main arguer	Rui Miguel Oliveira Ferro (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal

2019/07/31	High-throughput screening of hydrochlorothiazide cocrystals by vibrational spectroscopy Supervisor	Marisa Abreu Rodrigues (Master) Universidade do Porto Faculdade de Farmácia, Portugal
2019/06	Study og glibenclamide p-aminobenzoic acid cocrystals Supervisor	Rita Lima (Other) Universidade do Porto Faculdade de Ciências, Portugal Universidade do Porto Instituto de Ciências Biomédicas Abel Salazar, Portugal
2019/04/11	Monitorização de conversões polimórficas em formulações de olanzepina através de espectroscopia vibracional (Thesis) Main arguer	Cláudia Filipa Abreu Miranda (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal
2018/10	Mathematical Modelling for Development, Scale-up and Optimization of a process of Lyophilization (Thesis) Main arguer	Mauro Duarte (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal
2018/10	Multivariate analysis of a direct compression pharmaceutical tablets continuous manufacturing process (Thesis) Main arguer	Sílvia Miranda (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal
2018/02/28	Monitorização da qualidade de papas infantis por espetroscopia de infravermelho próximo (Thesis) Main arguer	Ana Telma da Silva Pereira Leal (Other) Universidade do Porto Faculdade de Farmácia, Portugal
2017/01/19	A continuous manufacturing model for the production of granules by roller compaction (Thesis) Main arguer	Rute Sofia Fonseca Cordeiro Dias (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal
2016/12	Intrinsic fluorescence in the discrimination of Acinetobacter calcoaceticus-Acinetobacter baumannii complex species (Thesis) Main arguer	Ana Sofia Rodrigues de Oliveira e Silva (Master) Universidade do Minho, Portugal
2016/11/28	Análise e Caracterização de Tintas de Instrumentos Manuais de Escrita por Espetroscopia de Raman (Thesis) Main arguer	Patrícia Alexandra de Araújo Pereira (Master) Universidade do Porto Instituto de Ciências Biomédicas Abel Salazar, Portugal

2016/06/27	Evaluation of the cost-benefit of the implementation of PAT systems for the production of solid forms in the pharmaceutical industry (Thesis) Main arguer	Pedro Miguel António Cordeiro (Master) Universidade de Lisboa Faculdade de Farmácia, Portugal

Ad Hoc journal article review

	Journal title (ISSN)	Publisher
2021/11 - Current	PLOS One (1932-6203)	PLOS
2021/09 - Current	Molecules (1420-3049)	MDPI AG
2021/02/10 - Current	Pharmaceuticals (1424-8247)	MDPI AG
2021/02 - Current	Jornal of Food Composition and Analysis (0889-1575)	Elsevier
2021/02 - Current	Current Research in Chemical Biology (2666-2469)	Elsevier
2020/09/15 - Current	Processes (2227-9717)	MDPI AG
2020/09/14 - Current	Molecular Biomedicine (2662-8651)	Springer
2020/09/01 - Current	ACS Omega (2470-1343)	American Chemical Society
2020/07/21 - Current	Journal of Chemical Information and Modeling (1549-9596)	ACS Publications
2020/05/26 - Current	Journal of Drug Delivery Science and Technology (1773-2247)	Elsevier
2019/10/14 - Current	French-Ukrainian Journal of Chemistry (2312-3222)	Taras Shevchenko National University of Kyiv
2019/10/09 - Current	Scientific Reports (2045-2322)	Springer Science and Business Media LLC
2019/09/13 - Current	MethodsX (2215-0161)	Elsevier
2019/03/01 - Current	European Journal of Pharmaceutical Sciences (0928-0987)	Elsevier
2019/02/25 - Current	Food Chemistry (0308-8146)	Elsevier
2019/01/25 - Current	Pharmaceutics (1999-4923)	MDPI AG
2018/11/30 - Current	Food Research International (0963-9969)	Elsevier
2018/11/04 - Current	Drug Development and Industrial Pharmacy (1520-5762)	Informa UK (Taylor & Francis)

2018/06/25 - Current	Chemometrics and Intelligent Laboratory Systems (0169-7439)	Elsevier
2018/02/27 - Current	International Journal of Pharmaceutics (0378-5173)	Elsevier
2018/02/14 - Current	Applied Sciences (2076-3417)	MDPI
2017/11/06 - Current	Journal of Pharmaceutical and Biomedical Analysis (0731-7085)	Elsevier
2017/09/21 - Current	Journal of Food Science (1750-3841)	Wiley (Blackwell Publishing)
2017/07/24 - Current	Sensors (1424-8220)	MDPI AG
2017/03/27 - Current	Journal of Food Process Engineering (1745-4530)	Wiley (Blackwell Publishing)
2017/01/20 - Current	Environmental Science and Pollution Research (1614-7499)	Springer-Verlag
2016/05/27 - Current	RSC Advances (2046-2069)	The Royal Society of Chemistry
2016/03/15 - Current	Food Analytical Methods (1936-976X)	Springer-Verlag
2012/02/10 - Current	Industrial & Engineering Chemistry Research (1520-5045)	American Chemical Society
2018/01 - 2018/01	Vibrational Spectroscopy for Plant Varieties and Cultivars Characterization (978-0-444-64048-2)	Elsevier B.V.

Association member

	Society Organization	Role
2021 - Current	Portuguese Society of Pharmaceutical Sciences	Member

Committee member

	Activity description Role	Institution / Organization
2020/10/01 - Current	Gender Balance Co-Leader of COST Action CA18112 - Mechanochemistryfor Sustainable Industry Member	European Cooperation in Science and Technology, Belgium
2020/10/01 - Current	Core Group Member of COST Action CA18112 - Mechanochemistryfor Sustainable Industry Member	European Cooperation in Science and Technology, Belgium

Conference scientific committee

	Conference title	Conference host
2022/02/28 - 2022/03/02	GREENERING Scientific meeting	GREENERING COST Action (CA18224)
2013/07 - 2013/08	EuPAT 6 - Sixth pan-European QbD &PATScience Conference European	Porto, Portugal

Course / Discipline taught

	Academic session	Degree Subject (Type)	Institution / Organization
2019/04/01 - Current	Process Analytical Tecnology - PAT	Engenharia Farmacêutica (Mestrado)	Universidade de Lisboa Instituto Superior Técnico, Portugal
2022/02 - 2022/07	Physical-Chemistry	Ciências Farmacêuticas (Mestrado integrado)	Universidade do Porto Faculdade de Farmácia, Portugal
2020/12/04 - 2020/12/04	Métodos Instrumentais de Analise I - theoretical lesson nº 21 Raman spectoscopy - theroy and applications	Ciências Farmacêuticas (Mestrado integrado)	Universidade do Porto Faculdade de Farmácia, Portugal

Evaluation committee

	Activity description Role	Institution / Organization	Funding entity
2020/03 - Current	Reviewer board of the Journal Pharmaceutics Other	Multidisciplinary Digital Publishing Institute AG, Switzerland	
2020/01 - Current	Section Board Member of the Journal Pharmaceuticals Member	Multidisciplinary Digital Publishing Institute AG, Switzerland	
2019 - Current	Evaluation of the National Research Agency (ANR) generic call 2019 as a Scientific Expert Evaluator	Agence nationale de la recherche, France	Agence nationale de la recherche, France
2020/03 - 2020/11/30	Guest Editor of Crystals - Specila Issue: "The Realm of Pharmaceutical Multicomponent Forms" Coordinator	Multidisciplinary Digital Publishing Institute AG, Switzerland	

Mentoring / Tutoring

	Topic	Student name
2021/09/07 - 2021/09/30	Green Solvents for pharmaceutical applications:	Ioanna Kostopoulou
2020/02 - 2020/06	Solubilidade e biodisponibilidade de fármacos sólidos: como melhorar estas propriedades?	Ricardo Nave Isaías
2020/02 - 2020/06	Como melhorar a solubilidade e biodisponibilidade de fármacos sólidos?	Sara Margarida dos Santos Silva
2019/09/30 - 2019/11/22	Development of sweet cocrystals	Miguel Moreira
2019/04/01 - 2019/07/31	Multiple curve resolution for cocrystal purity determination	Ana Luiza Pinto Queiroz
2018/02/19 - 2018/02/23	Application of chemometrics and PAT strategy in industrial pharmacy	Joanna Ronowicz
2017/09 - 2017/09	Chemometrics in pharmaceutical applications	Basma Mohamed Eltanany
2012/09/01 - 2013/11/19	In-situ dissolution testing monitoring of pharmaceutical solid dosage forms by near infrared spectroscopy	Ana Rita Matias
2011/01/02 - 2013/07	Manufacturing process and quality control of solid dosage forms optimization for the pharmaceutical industry by near infrared spectroscopy	Raquel Queiroz Portela Mendes de Figueiredo
2012 - 2012	Implementation of process analytical technology systems in pharmaceutical production processes	Annelies Dhaese
2011 - 2011	Intrinsic fluorescence spectroscopy for differentiating different acinetobacter species/subspecies using multivariate data analysis	Lien Mahy
2007 - 2008	Advanced control of Pharmaceutical specialties with near infrared spectrosocopy	Ana Isabel de Vasconcelos Cruz
2007 - 2008	Advanced control of pharmaceutical specialties with near-infrared spectroscopy and chemometrics	Sandra Liliana de Oliveira Soares

Other jury / evaluation

	Activity description	Institution / Organization
2019/09/09 - Current	Evaluation of a research Scholarship for a student with a Master degree. Reference ICETA 2019-65	Universidade do Porto Faculdade de Farmácia, Portugal REQUIMTE LAQV Porto, Portugal

2022/04/06 - 2022/04/06	International call for PhD holder Researchers, under a work contract for a non-fixed term for 1 (one) research position (Referência REQUIMTE 2022-13), to pursue scientific research activities in the EXPL/NAN-MAT/0743/2021, HONEY2KILL- Honey-exosomes to fight superbugs project.	REQUIMTE LAQV Porto, Portugal

Distinctions

Other distinction

2010	Post-Doc grant (SFRH/BPD/74788/2010) Fundação para a Ciência e a Tecnologia, Portugal
2006	PhD scholarship (SFRH / BD / 32614 / 2006) Fundação para a Ciência e a Tecnologia, Portugal
2001	Research Grant (PRAXIS/QUI/10137/98) Universidade de Coimbra Faculdade de Ciencias e Tecnologia, Portugal